F Bubble Sort

Input: Standard Input
Output: Standard Output

Check the following code which counts the number of swaps of bubble sort.

```
int findSwaps( int n, int a[] )
{
    int count = 0, i, j, temp, b[100000];

    for( i = 0; i < n; i++ ) {
        b[i] = a[i];
    }
    for( i = 0; i < n; i++ ) {
        for( j = 0; j < n - 1; j++ ) {
            if( b[j] > b[j+1] ) {
                temp = b[j];
                b[j] = b[j+1];
                b[j+1] = temp;

                count++;
            }
        }
    }
    return count;
}
```

You have to find the average value of **'count'** in the given code if we run **findSwaps()** infinitely many times using constant **'n'** and each time some random integers (from **1** to **n**) are given in array **a[]**. You can assume that the input integers in array **a[]** are distinct.

Input

Input starts with an integer **T (≤ 1000)**, denoting the number of test cases.
Each test case contains an integer **n ($1 \le n \le 10^5$)** in a single line.

Output

For each case, print the case number and the desired result. If the result is an integer, print it. Otherwise print it in **'p/q'** form, where **p** and **q** are relative prime.

Sample Input	Output for Sample Input
2 1 2	Case 1: 0 Case 2: 1/2

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